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# Objective Exam

TEST REPORT

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Version <1.0>  
<1<sup>st</sup> April 2018>

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## VERSION HISTORY

| Version # | Implemented By  | Revision Date               | Brief Description                        |
|-----------|---|-----------------------------|--|
| 1.0       | <u>Group 9</u><br>Shreya Patel (B16CS025)<br>Saksham Gupta (B16CS030) | 1 <sup>st</sup> April 2018  | All necessary functionalities are tested |
| 2.0       | <u>Group 13</u><br>Sarvesh (B16CS032)<br>Vivek (B16CS039)             | 10 <sup>th</sup> April 2018 | All the test cases have been verified    |

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**1.0 INTRODUCTION****1.1 PURPOSE**

This *Objective Exam System Test Report* provides a summary of the results of test performed as outlined within this document.

**2.0 TEST PLAN**

The test plan for this project can be summed up into following major goals:

1. To check whether the actual software follows the SRS completely or not and if not then report on the changes.
2. To check whether the modules contain any bug, error and any kind of unexpected behavior, and if present then report it.
3. To see if all functionalities work in the specified manner or not.

**3.0 DETAILS OF UNIT TESTING****3.1 ADMIN\_LOGIN (T1)****3.1.1 TEST ITEMS**

1. PASSWORD

**3.1.2 FEATURES TO BE TESTED**

1. Whether the entered PASSWORD matches the actual password of the admin or not

**3.1.3 ITEM PASS/FAIL CRITERIA**

1. The item passes if password is entered correctly that is it matches the admin password and thus admin options are displayed
2. The item passes if password is entered incorrectly and the admin access to its functions are denied
3. The item fails if password is entered incorrectly and admin is given access, or if password is entered correctly but access is denied. This may happen because password is case sensitive.

| Test Case ID | INPUT              | Intended Result                        | Actual Result                          | Pass/Fail | Comments                   | Verification |
|--------------|--------------------|--|--|-----------|----------------------------|--------------|
| T1.1         | PASSWORD =password | Login successful<br>Display Admin Menu | Login successful<br>Display Admin Menu | pass      | -                          | Yes          |
| T2.2         | PASSWORD =PassWord | Access denied<br>(back to Main Menu)   | Access denied<br>(back to Main Menu)   | pass      | Password is case sensitive | Yes          |

**3.2 REGISTER (T2)****3.2.1 TEST ITEMS**

1. FIRSTNAME
2. LASTNAME
3. DATE OF BIRTH

**3.2.2 FEATURES TO BE TESTED**

1. Whether the entered firstname, lastname, date of birth are valid
2. Whether the new student is added to the database successfully

**3.2.3 ITEM PASS/FAIL CRITERIA**

1. The item passes if the entered credentials are valid and the new student information is successfully added to the database
2. The item fails if the student information is not added successfully to the database that is if there are some exceptions or bugs while handling database file

| Test Case ID | INPUT   | Intended Result  | Actual Result  | Pass/Fail | Comments   | Verification   |
|--------------|---|--|--|-----------|--|--|
| T2.1         | FirstName = "John"<br>LastName = "Stephen"<br>Date of Birth = "5 - 5 - 2005"  | Registered successful<br>Student Details are displayed | Registered successful<br>Student Details are displayed | pass      | -  | Yes  |
| T2.2         | FirstName = "John"<br>LastName = "Stephen"<br>Date of Birth = "55 - 5 - 2005" | Re-enter date  | Re-enter date  | pass      | The character inputs for date of birth are not handled | No<br>(The software crashed on giving character inputs in the DOB field) |

**3.3 GIVE\_TEST (T3)****3.3.1 TEST ITEMS**

1. COURSEID
2. USERID & DATE OF BIRTH
3. QUESTIONS

**3.3.2 FEATURES TO BE TESTED**

1. Whether the entered COURSEID is valid
2. Whether the entered USERID and DATE OF BIRTH are valid
3. Whether sufficient questions of the entered COURSEID are available in the questions database

**3.3.3 ITEM PASS/FAIL CRITERIA**

1. The item passes if COURSEID is valid (among the given values)
2. The item passes if USERID & DATE OF BIRTH are valid
3. The item fails if any of the COURSEID, USERID or DATE OF BIRTH is invalid
4. The item fails if number of questions in the database are less than number of questions to be asked in the test

| Test Case ID | INPUT   | Intended Result   | Actual Result   | Pass/Fail | Comments                       | verification |
|--------------|---|---|---|-----------|--------------------------------|--------------|
| T3.1         | COURSEID = 4  | Error Message<br>“INSUFFICIENT<br>QUEESION IN<br>DATABASE”<br>(back to Main Menu) | Error Message<br>“INSUFFICIENT<br>QUEESION IN<br>DATABASE”<br>(back to Main Menu) | pass      | -                              | Yes          |
| T3.2         | COURSEID = 10   | Re-enter valid<br>CourseID  | Re-enter valid<br>CourseID  | pass      | Valid<br>CourseId<br>{1,2,3,4} | Yes          |
| T3.3         | COURSEID = 1<br>USERID = 1<br>DATE OF BIRTH<br>= 5-5-2005 | Test Displayed  | Test Displayed  | pass      | -                              | Yes          |
| T3.4         | COURSEID = 1  | Display Error Message   | Display Error   | pass      | -                              | Yes          |

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|      |  |  |   |      |   |     |
|------|--|--|---|------|---|-----|
|      | USERID = 100<br>DATE OF BIRTH<br>= 5-5-2005                | “STUDENT NOT<br>FOUND”<br>(back to Main Menu)                          | Message<br>“STUDENT NOT<br>FOUND”<br>(back to Main Menu)                  |      |   |     |
| T3.5 | COURSEID = 1<br>USERID = 1<br>DATE OF BIRTH<br>= 15-5-2005 | Display Error Message<br>“STUDENT NOT<br>FOUND”<br>(back to Main Menu) | Display Error<br>Message<br>“STUDENT NOT<br>FOUND”<br>(back to Main Menu) | pass | - | Yes |

### 3.4 GET\_RESULT (T4)

#### 3.4.1 TEST ITEMS

1. USERID
2. DATE OF BIRTH

#### 3.4.2 FEATURES TO BE TESTED

1. Whether the entered USERID & DATE OF BIRTH are valid
2. Whether the result is displayed successfully

#### 3.4.3 ITEM PASS/FAIL CRITERIA

1. The item passes if the entered details are valid and the result of that particular user id is displayed
2. The item fails if the USERID or DATE OF birth is invalid

| Test Case ID | INPUT                                       | Intended Result  | Actual Result  | Pass /Fail | Comment | Verification   |
|--------------|---|--|--|------------|---------|--|
| T3.1         | USERID = 1<br>DATE OF BIRTH<br>= 5-5-2005   | Display Result   | Result Displayed   | pass       | -       | Yes  |
| T3.1         | USERID = 100<br>DATE OF BIRTH<br>= 5-5-2005 | Display Error Message<br>“STUDENT NOT<br>FOUND”<br>(back to Main Menu) | Display Error Message<br>“STUDENT NOT<br>FOUND”<br>(back to Main Menu) | pass       | -       | No<br>(The program<br>crashes on<br>giving character<br>input) |
| T3.2         | USERID = 1<br>DATE OF BIRTH<br>=15-5-2005   | Display Error Message<br>“STUDENT NOT<br>FOUND”<br>(back to Main Menu) | Display Error Message<br>“STUDENT NOT<br>FOUND”<br>(back to Main Menu) | pass       | -       | Yes  |



### 3.5 ADD\_QUESTIONS (T5)

#### 3.5.1 TEST ITEMS

1. COURSEID
2. QUESTION (Includes Options & CorrectAns)

#### 3.5.2 FEATURES TO BE TESTED

1. Whether the entered COURSEID is valid
2. Whether the entered CorrectAns is one of the options
3. Whether the questions and options are successfully registered

#### 3.5.3 ITEM PASS/FAIL CRITERIA

1. The item passes if the entered COURSEID is valid and option to add questions to that particular course is enabled
2. The item fails if the COURSEID is invalid

| Test Case ID | INPUT  | Intended Result                        | Actual Result                          | Pass/Fail | Comments | Verification |
|--------------|--|--|--|-----------|----------|--------------|
| T3.1         | Input = x  | Back to Admin Menu                     | Back to Admin Menu                     | Pass      | -        | Yes          |
| T3.2         | Input = a<br>COURSEID = 10   | Re-enter valid CourseId                | Re-enter valid CourseId                | pass      | -        | Yes          |
| T3.3         | Input = a<br>COURSEID = 1<br>Question = 2+2<br>Choice1 = 1<br>Choice2 = 4<br>Choice3 = 7<br>Choice4 = 10<br>CorrectAns = 2 | Question Added Successfully            | Question Added Successfully            | pass      | -        | Yes          |
| T3.4         | Input = a<br>COURSEID = 1<br>Question = 2+2<br>Choice1 = 1<br>Choice2 = 4<br>Choice3 = 7<br>Choice4 = 10<br>CorrectAns = 6 | Re-enter valid option from the choices | Re-enter valid option from the choices | pass      | -        | Yes          |

### 3.6 SETTINGS (T7)

#### 3.6.1 TEST ITEMS

1. Change Admin Password
2. Change Students Database Filename
3. Change Questions Database Filename
4. Change Marks Awarded for Right Answer
5. Change Marks Awarded for Wrong Answer
6. Change Number of Questions to be asked in the Test

#### 3.6.2 FEATURES TO BE TESTED

1. Whether the Admin password is changed.
2. Whether the Database Filenames are changed.
3. Whether the Marks are changed
4. Whether number of questions to be asked in the test are changed.

#### 3.6.3 ITEM PASS/FAIL CRITERIA

1. The item passes if the entered details are valid and changes are updated
2. The item fails if any of the changes made are not successful

| Test Case ID | INPUT                   | Intended Result  | Actual Result  | Pass/Fail | Comments           | verification |
|--------------|-------------------------|--|--|-----------|--------------------|--------------|
| T3.1         | Input = n               | No changes<br>Back to Admin Menu                                 | No changes<br>Back to Admin Menu                                 | Pass      | -                  | Yes          |
| T3.2         | Input = abc             | No changes<br>Back to Admin Menu                                 | No changes<br>Back to Admin Menu                                 | Pass      | -                  | yes          |
| T3.3         | Input = y               | Options to make changes  | Options to make changes  | Pass      | -                  | Yes          |
| T3.4         | New Password = PASSWORD | Password Changed   | Password Changed   | pass      | -                  | Yes          |
| T3.5         | New Password = X        | Password Unchanged   | Password Unchanged   | pass      | -                  | Yes          |
| T3.6         | New Marks = -1          | Marks Unchanged  | Marks Unchanged  | pass      | -                  | Yes          |
| T3.7         | New Marks = 10          | Marks changed  | Marks changed  | pass      | -                  | Yes          |
| T3.8         | New Marks = a           | Error Message<br>“ENTER POSITIVE INTEGER VALUES ELSE NO CHANGES” | Error Message<br>“ENTER POSITIVE INTEGER VALUES ELSE NO CHANGES” | pass      | Exceptions Handled | Yes          |

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|       |                                  |  |  |      |                          |     |
|-------|----------------------------------|--|--|------|--------------------------|-----|
| T3.9  | No of Questions to be asked = a  | Error Message<br>“ENTER POSITIVE INTEGER VALUES ELSE NO CHANGES” | Error Message<br>“ENTER POSITIVE INTEGER VALUES ELSE NO CHANGES” | pass | Exceptions Handled       | Yes |
| T3.10 | No of Questions to be asked = -1 | No of Questions to be asked remains unchanged                    | No of Questions to be asked remains unchanged                    | pass | Number can't be negative | Yes |
| T3.11 | No of Questions to be asked = 5  | No of Questions to be asked changed successfully                 | No of Questions to be asked changed successfully                 | pass | -                        | Yes |

### 4.0 DETAILS OF SYSTEM TESTING

#### 4.1 ADMIN\_LOGIN

| Step | Test Step/ Input  | Intended Result  | Actual Result  | Pass/ Fail | Comments | verification   |
|------|---|--|--|------------|----------|--|
| 1    | Input password  | -  | -  | -          | -        | Yes{But no privacy of password as password is not hidden } |
| 2    | Check whether input password matches admin password<br>1. If matched<br>2. If not matched | 1. Admin Menu is displayed<br>2. Access Denied<br>Go back to main menu | 1. Admin Menu is displayed<br>2. Access Denied<br>Go back to main menu | pass       | -        | Yes  |

#### 4.2 REGISTER

| Step | Test Step/ Input                                      | Intended Result  | Actual Result              | Pass/ Fail | Comments | verification                  |
|------|---|--|----------------------------|------------|----------|-------------------------------|
| 1    | Enter Details<br>1. Enter first name<br>2. Enter last | If all the entries are valid and day, month and year are | Student Registered Student | pass       | -        | No<br>(The program crashes if |

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|   |  |  |                        |      |   |   |
|---|--|--|------------------------|------|---|---|
|   | name<br>3. Enter day of birth<br>4. Enter month of birth<br>5. Enter year of birth | within acceptable limits then the student is registered<br>Student details are displayed | details are displayed  |      |   | given inputs separated by “ ” and also if character is given in (DOB) |
| 2 | Invalid Entries  | Student Not Registered.<br>The software asks user to re-enter the desired entries        | Student Not Registered | pass | - |   |

### 4.3 GIVE\_TEST

| Step | Test Step/ Input  | Intended Result                           | Actual Result                             | Pass/Fail | Comment | verification |
|------|---|---|---|-----------|---------|--------------|
| 1    | Enter Details<br>1. Enter Course ID<br>2. Enter User ID<br>3. Enter date of birth   | -   | -   | -         | -       | Yes          |
| 2    | If Invalid Entries  | Test Not displayed<br>(back to Main Menu) | Test not displayed<br>(back to Main Menu) | pass      | -       | Yes          |
| 3.   | If all the entries are valid and day, month and year are within acceptable limits<br>Then Check for availability of minimum questions in the database | -   | -   | -         | -       | Yes          |
| 3    | If the number of questions in the   | Test not displayed                        | Test not displayed                        | pass      | -       | yes          |

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|   |  |   |                          |      |   |     |
|---|--|---|--------------------------|------|---|-----|
|   | database are less than number of questions to be asked   | and display error of insufficient questions | Error message displayed  |      |   |     |
| 4 | If sufficient questions are available<br>1.Display Questions<br>2.Input answers<br>3.Calculate marks | Questions displayed                         | Questions displayed      | pass | - | Yes |
| 5 | Display result of the test and update the result into database of the student                        | Marks Obtained displayed                    | Marks Obtained displayed | pass | - | Yes |

### 4.4 GET\_RESULT

| Step | Test Step/ Input  | Intended Result   | Actual Result                                  | Pass/Fail | Comment | Verification                           |
|------|---|---|--|-----------|---------|--|
| 1    | Enter Details<br>1. Enter USER ID<br>2. Enter date of birth   | -   | -  | -         | -       | No (Crashes on character input in DOB) |
| 2    | If Invalid Entries  | Display Error message<br>“Student Not Found”            | Error message displayed<br>“Student Not Found” | Pass      | -       | Yes                                    |
| 3    | If all the entries are valid and day, month and year are within acceptable limits<br>Then get profile and result of the student from the database | Display Profile<br>Display results of the test appeared | Profile displayed<br>Result Displayed          | Pass      | -       | yes                                    |

### 4.5 ADD\_QUESTION

| Step | Test Step/ Input       | Intended Result | Actual Result | Pass/Fail | Comment | verification |
|------|------------------------|-----------------|---------------|-----------|---------|--------------|
| 1    | Successful Admin Login | -               | -             | -         | -       | Yes          |

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|   |  |  |  |      |   |     |
|---|--|--|--|------|---|-----|
| 2 | Enter Details<br>1. Enter Course ID<br>2. Enter Question<br>3. Enter options | Display Error message<br>“Student Not Found” | Error message displayed<br>“Student Not Found” | Pass | - | yes |
| 3 | If inputs are not within limits, user is asked to re-enter the details       | Messages to re-enter are displayed           | Messages to re-enter are displayed             | Pass | - | Yes |
| 3 | Entered Valid Question is added to the Database                              | -  | -  | -    | - | Yes |
| 4 | Enter ‘x’ to stop  | Back to Admin Menu                           | Admin Menu displayed                           | Pass | - | yes |

**4.6 SETTINGS**

| Step | Test Step/ Input   | Intended Result   | Actual Result   | Pass /Fail | Comment | Verification |
|------|--|---|---|------------|---------|--------------|
| 1    | Display Current Settings   | -   | -   | -          | -       | Yes          |
| 2    | Enter<br>1. y to change<br>2. n to exit  | 1. Options to Change<br>2. back to Main Menu  | 1. Options to Change<br>2. back to Main Menu  | Pass       | -       | Yes          |
| 3    | If input=y<br>Steps:<br>1.Enter new Admin Password or X for no change<br>2.Enter new Students Database filename or X for no change<br>3. Enter new Questions Database filename or X for no change<br>4. Enter Marks for Right Answer<br>5. Enter Marks for | 1.Admin Password updated/ remain unchanged resp<br>2.Students database filename updated/ remain unchanged resp<br>3.Admin Password updated/ remain unchanged resp<br>4.Positive Marks updated<br>5.Negative Marks | 1.Admin Password updated/ remain unchanged resp<br>2.Students database filename updated/ remain unchanged resp<br>3.Admin Password updated/ remain unchanged resp<br>4.Positive Marks updated<br>5.Negative Marks | Pass       | -       | Yes          |

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|   |   |   |   |      |   |     |
|---|---|---|---|------|---|-----|
|   | Wrong Answer<br>6. Enter no. of Questions to be asked in the test | updated<br>6.No. of questions to be asked in a Test updated | updated<br>6.No. of questions to be asked in a Test updated |      |   |     |
| 4 | Update changes in the system                                      | Back to Admin Menu  | Admin Menu displayed  | Pass | - | yes |